ENGINEERING AND RELATED SERVICES AUGUST 19, 2011

STATE PROJECT NO. H.006138.5 F.A.P. NO. 2606(510) OFF-SYSTEM HIGHWAY BRIDGE PROGRAM JEFFERSON PARISH

STATE PROJECT NO. H.009187.5 F.A.P. NO. H009187 OFF-SYSTEM HIGHWAY BRIDGE PROGRAM JEFFERSON PARISH

Under Authority granted by Title 48 of Louisiana Revised Statutes, the Louisiana Department of Transportation and Development (DOTD) hereby issues a Request for Qualification Statements (RFQ) on Standard Form 24-102 (SF 24-102), "Professional Engineering and Related Services", revised January 2003, from Consulting Firms (Consultant) to provide engineering and related services. **All requirements of Louisiana Professional Engineering and Land Surveying (LAPELS) Board must be met at the time of contract execution.** One Prime-Consultant/Sub-Consultant(s) (Consultant/Team) will be selected for this Contract. A map of the project limits for the proposed work is available upon request.

Project Manager – Mr. Gary Pentek

All inquiries concerning this advertisement should be sent in writing to Debbie.Guest@LA.gov.

PROJECT DESCRIPTION

The selected Consultant will receive a set of unchecked revised post plan-in-hand prints and a disc for their use in completing final plans. The Consultant/Team will be required to provide all necessary engineering and related services required for developing final plans for the replacement of two bridges in Jefferson Parish, which are off the State Highway System. The projects will be grouped as 2 construction packages. The project numbers and modules required are as follows:

STRUCTURES REQUIRED					
PROJECT	SLAB SPAN BRIDGE	STD. OR NON STD.	CROSSING	SCOUR ANALYSIS	
H.006138.5 "PKG A"	5 @ 20'	NON STD.	90°	YES	

H.009187.5 "PKG B" 3 @ 20' NON STD.	90°	YES
----------------------------------------	-----	-----

SCOPE OF SERVICES

FINAL PLANS

The number of plan sheets required are as follows:

<u>DESCRIPTION</u>	NUMBER OF SHEETS
	SHEETS
Title Sheet and Layout Map	2
Layout Map Sheet	2
Typical Section Sheet	2
Summary Sheets	As Required
Plan/Profile Sheet (Rural) (1"=50")	2
Erosion Control Plans (1"=20")	2
Construction Signing Sheet	2
General Bridge Plan Sheet	2
Cross-Section ERWK (Mainline)	8

The Consultant will provide a scour analysis for these sites.

Following the acquisition and approval of the deep soil borings and the scour analyses approvals, the Consultant is to submit two sets of the pile length calculations, title sheet, layout map, general bridge plans, and boring logs for review of the pile lengths. Prints are to be half-size.

"PKG. A" (LFD DESIGN) THE REQUIRED STRUCTURE IS:

H.006138.5

5 @ 20' slab span bridge (30' wide) on a 90° crossing.

The bridge will be cast-in-place only.

In addition to the sheets listed, the following details will be required:

Span details - modify a standard for 32' width

End Bent details - modify standards for 32' width

Intermediate Bent details – modify standards for 32' width

Approach slab detail w/o asphalt detail – modify standard for 32' width and 10' length (approach slabs will be 20' long with tapered concrete barrier rails.)

Deep Soil Borings- consult enclosed mandatory requirements Miscellaneous details (All bents will be designed and detailed to accept utilities)

"PKG.B" (LFD DESIGN) THE REQUIRED STRUCTURE IS:

H.009187.5

3 @ 20' slab span bridge (28' wide) on a 90° crossing.

The bridge will be cast-in-place only.

In addition to the sheets listed, the following details will be required:

Span details - modify span no. 1 to accommodate turning radii End Bent details (Bents #1) - modify end bent 28' standard detail to support horizontal reactions from sheet pile bulkhead and increased length due to turning radii

End Bent details (Bents #4) - modify end bent detail to support horizontal reactions from sheet pile bulkhead

East approach slab detail w/o asphalt detail – modify standard for 28' width and 10' length (approach slab will be 20' long with tapered concrete barrier rails.)

West approach slab detail w/o asphalt detail- modify standard for 28' width and 10' length (approach slab will be approx. 17'-3" long and approx. 66' wide with curved tapered barrier rails)

Sheet Pile Bulkhead – provide installation details and size for both bridge approaches

Deep Soil Borings- consult enclosed mandatory requirements Miscellaneous details

GEOTECHNICAL SERVICES

The Consultant is to obtain soil borings, and perform sampling and testing pertinent to a geotechnical investigation at two sites in Jefferson Parish. The information shall be collected in *English* units of measurement. The project numbers are as follows:

State Project No. H.006138.5 - Poplar Street Bridge over Bonnabel Canal State Project No. H.009187.5 - 23rd Street Bridge over Canal No. 17

SOIL BORINGS:

The Consultant shall obtain a total of two soil borings at each bridge site on the centerline of the proposed alignment for a total of four deep soil borings; one boring shall be taken at the centerline of each of the proposed end bent centerlines. The borings shall be taken to minimum depth of 120°. The boring contractor shall be a licensed drilling contractor with the State of Louisiana and shall have had experience with DOTD work.

Borings shall be made with rotary type drill rigs. Undisturbed samples of cohesive and semi-cohesive soils shall be obtained from each distinct soil stratum that is penetrated, not to exceed depth intervals of 5' between samples. Sampling of cohesive and semi-cohesive soil shall be accomplished with a 3" (nominal) diameter Shelby tube sampling barrel. All Shelby tube samples shall be extruded from the barrel at the drilling site in accordance with AASHTO Designation T207 by means of a continuous pressure hydraulic ram. Extrusion by water pressure is prohibited. Samples shall be extruded directly into a sample trough, and shall not be caught with hands. When cohesionless soils are encountered in any boring at any depth, samples shall be taken in accordance with AASHTO T207 on intervals not to exceed 3' centers, in conjunction with the performance of Standard Penetration Tests (AASHTO T206). The latitude and longitude of each boring location shall be determined in the field using a portable GPS unit. The latitude and longitude shall be determined and reported in DMS format to the nearest 0.10 seconds.

All samples shall be placed in sealed containers immediately following extraction in accordance with AASHTO Designation T206 or T207. All sampling, drilling, and borehole sealing practices shall conform to current <u>Standard Specifications for Methods of Sampling and Testing of the American Association of State Highway and Transportation Officials (AASHTO) and the Water Wells Rules, Regulations and Standards for the State of Louisiana.</u>

The Consultant shall be responsible for access to all boring sites and for the clearing of utility locations prior to drilling. The Consultant shall protect all utilities, private or public, at all times during geotechnical operations and shall restore all damages resulting from boring operations at each work site to their original condition prior to termination of contract requirements.

All drilling and sealing operations shall be conducted to assure the least possible obstruction to traffic. Roadway and bridge surfaces shall be kept reasonably free from

borehole cuttings and sealing material and in such condition that the public can travel in safety. Provisions for Flagman Control Devices shall be the responsibility of the Consultant.

Any additional borings or tests required for analysis will be at "No Direct Pay".

LABORATORY TESTS:

Soil mechanics laboratory tests shall be performed on a majority of the samples obtained from the borings. Unconsolidated undrained triaxial compression shear tests and Atterberg limit tests shall be performed on 75% of the samples taken. Re-molded unconfined compression tests to determine the sensitivity of samples that failed in slickensides at low strains can also be performed as deemed necessary. If required, consolidation tests shall be performed according to AASHTO T216, and results shall be reported as graphs of "Void Ratio vs. Log of Pressure" and "Coefficient of Consolidation vs. Log of Pressure". Consolidation tests shall be run at sufficient depths to determine long-term settlement. The number of consolidation tests shall be determined by the consultant to sufficiently provide data for foundation design and for determining longterm settlement. Both plots may be shown on the same graph, if adequately labeled. Any sample from a clay layer that shows signs of being over-consolidated must be subjected to a load/rebound/re-load cycle during the consolidation testing, as per AASHTO T216. Any sample selected for consolidation testing shall also have the specific gravity determined according to AASHTO T100, and the Atterberg Limits determined According to DOTD TR-428, and with supporting results reported. Laboratory classification of soils shall be in accordance with ASTM D 2487. Additionally, sufficient unit weight tests and natural water content tests shall be performed to augment the other tests and to provide engineering data necessary to design bridge and embankment structures, all in accordance with the present design requirements and standard engineering practice. All tests shall conform to current AASHTO Standard Specifications for Sampling and Testing.

LABORATORY ANALYSIS AND REPORT:

Logs of borings, laboratory test results, and analysis shall be furnished in a format acceptable to the DOTD. The Consultant shall obtain three or four mil polyester double matte film for use in reporting the results. If the plan sheets are to be drafted manually, the "blank" sheet should be printed in reverse image, and the data placed on the opposite side. The DOTD Materials and Testing Section will provide an example of the format to the Consultant. The lettering used on the profiles shall be of such size and clarity that the legibility of data can be maintained when reduced to 50 % of its original size. The latitude and longitude of each boring shall be shown on the plan sheet in DMS format to the nearest 0.10 seconds.

Soil profiles shall be grouped on sheets according to the Construction Project Number.

All boring and test results must be reported in **English units**. All reported test results, including each profile sheet, shall be signed, sealed, and dated by the Professional Engineer in responsible charge of testing.

The Consultant is responsible for verifying the stations and elevations of the borings prior to submitting documents and plans for review. Plan sheets without natural ground elevations at the location of each boring will not be accepted. Each boring shall be plotted on the sheet with the same elevation at the top of the column, showing the horizontal positioning of each boring relative to the others on the sheet.

ADDITIONAL SERVICES

The scope of services, compensation and contract time for future engineering services to provide the following will be established by Supplemental Agreement(s). All additional Sub-Consultants required to perform these services are subject to approval as per RS 48:290.D prior to execution of the Supplemental Agreement(s).

• If required, Construction Support (Stage 5: Construction, Part I: Construction Support, Part II Shop Drawing Review)

REFERENCES

All designs and engineering documents will meet the standard requirements as to format and content of the DOTD; and will be prepared in accordance with the latest applicable editions, supplements and revisions of the following:

- 1. AASHTO Standards, ASTM Standards or DOTD Test Procedures
- 2. DOTD Location and Survey Manual
- 3. DOTD Roadway Design Procedures and Details
- 4. DOTD Hydraulics Manual
- 5. DOTD Standard Specifications for Roads and Bridges
- 6. Manual of Uniform Traffic Control Devices
- 7. DOTD Traffic Signal Design Manual
- 8. National Environmental Policy Act (NEPA)
- 9. National Electric Safety Code
- 10. National Electric Code (NFPA 70)
- 11. DOTD Environmental Impact Procedures (Vols. I-III)
- 12. Policy on Geometric Design of Highways and Streets
- 13. Construction Contract Administration Manual
- 14. Materials Sampling Manual
- 15. DOTD Bridge Design Manual
- 16. Consultant Contract Services Manual
- 17. Geotechnical Engineering Services Document
- 18. Bridge Inspectors Training Manual/90
- 19. Federal Aid Off-System Highway Bridge Program Guidelines
- 20. Code of Federal Regulations 29 CFR 1926 (OSHA)

COMPENSATION

The total estimated compensation to the Consultant for all services rendered in connection with this Contract will be a non-negotiated lump sum of \$110,016

CONTRACT TIME

The Consultant shall proceed with the services specified herein after the execution of this Contract and upon written Notice-To-Proceed from the DOTD. The overall contract time to complete this project is estimated to be **365 calendar days**. The delivery schedule for all project deliverables shall be established by the Project Manager.

Deep Soil Borings - 70 days subsequent to the Contract notice to proceed date (NTP)

Preliminary Advanced Check Prints (two full size sets) – 90 days subsequent to the Contract notice to proceed date (NTP)

Pile Length Calculations and Associated Documents -30 days subsequent to approval of scour analyses and deep soil boring submittal

Advanced Check Prints (eight full size sets) – 30 days subsequent to approval of preliminary advanced check prints

Final Plans (Tracings) (per off-system guidelines) – 30 days subsequent to approval of advanced check prints

QUALITY CONTROL/QUALITY ASSURANCE

The DOTD requires the Consultant to develop a Quality Control/Quality Assurance program or adopt DOTD's program; in order to provide a mechanism by which all construction plans can be subject to a systematic and consistent review. Consultant's must ensure quality and adhere to established design policies, procedures, standards and guidelines in the preparation and review of all design products. The DOTD shall provide limited input and technical assistance to the Consultant. The Consultant's plans shall meet or exceed DOTD's Construction Plans Quality Control / Quality Assurance Manual and EDSM No. Volume I. 1.1.24 on Plan Quality. The Consultant shall transmit plans with a DOTD Quality Control/Quality Assurance Checklist, Documentation Manual for Project Delivery, and a certification that the plans meet the DOTD's quality standards.

MINIMUM PERSONNEL REQUIREMENTS

The following requirements must be met at the time of:

1. At least one Principal must be a Professional Engineer registered in the State of Louisiana.

- 2. The Prime-Consultant must employ on a full time basis, a minimum of one Professional Civil Engineer, registered in the State of Louisiana, with five years experience in bridge design, and a corresponding support staff.
- 3. In addition to the above requirements, the Prime-Consultant must also employ on a full-time basis, or through the use of a Sub-Consultant(s):
 - a. One Registered Professional Land Surveyor.
 - b. One Environmental Professional Civil Engineer with a minimum of five years experience in wetland delineation geotechnical design.

EVALUATION CRITERIA

The general criteria to be used by DOTD (when applicable) in evaluating responses for the selection of a Consultant to perform these services are:

- 1. Consultant's firm experience on similar projects, weighting factor of 3;
- 2. Consultant's personnel experience on similar projects, weighting factor of 4;
- 3. Consultant's firm size as related to the estimated project cost, weighting factor of 3;
- 4. Consultant's past performance on similar DOTD projects, weighting factor of 6;**
- 5. Consultant's current work load, weighting factor of 5;
- 6. Location where the work will be performed, weighting factor of 4;

**The Off-System Bridges (OB) performance rating will be used for this project.

Complexity level: Simple

Consultants will be evaluated as indicated in Items 1-6. The evaluation will be by means of a point-based rating system. Each of the above criteria will receive a rating on a scale of 0-4. The rating will then be multiplied by the corresponding weighting factor. The firm's rating in each category will then be added to arrive at the Consultant's final rating.

If Sub-Consultants are used, the Prime Consultant must perform a minimum of 51% of the work for the overall project. Each member of the Consultant/Team will be evaluated on their part of the contract proportional to the amount of their work. The individual team member ratings will then be added to arrive at the Consultant/Team rating.

Communication Protocol

DOTD's Project Evaluation Team will be responsible for performing the above described evaluation, and will present a short-list of the three (if three are qualified) highest rated Consultants to the Secretary of the DOTD. The Secretary will make the final selection. Below are the proposed Team members. DOTD may substitute for any reason provided the members meet the requirements of R.S. 48:291.

- 1. Debra L. Guest Ex officio
- 2. Gary Pentek Project Manager
- 3. Patti Morgan
- 4. Laura Riggs
- 5. Hubert Almeida

6. Jenan Nakhleh

Rules of Contact (Title 48 Engineering and Related Services)

These rules are designed to promote a fair, unbiased, legally defensible selection process. The LA DOTD is the single source of information regarding the Contract selection. The following rules of contact will apply during the Contract selection process and will commence on the date of advertisement and cease at the contract execution with the selected firm. Contact includes face-to-face, telephone, facsimile, Electronic-mail (E-mail), or formal written communications. Any contact determined to be improper, at the sole discretion of the LA DOTD, may result in the rejection of the submittal (SF 24-102):

- A. The Consultant shall correspond with the LA DOTD regarding this advertisement only through the LA DOTD Consultant Contracts Services Administrator:
- B. The Consultant, nor any other party on behalf of the Consultant, shall not contact any LA DOTD employees, including but not limited to, department heads; members of the evaluation teams; and any official who may participate in the decision to award the contract resulting from this advertisement except through the process identified above. Contact between Consultant organizations and LA DOTD employees is allowed during LA DOTD sponsored one-on-one meetings;
- C. Any communication determined to be improper, at the sole discretion of the LA DOTD, may result in the rejection of submittal, at the sole discretion of the LA DOTD;
- D. Any official information regarding the project will be disseminated from the LA DOTD'S designated representative on the LA DOTD website. Any official correspondence will be in writing;
- E. The LA DOTD will not be responsible for any verbal exchange or any other information or exchange that occurs outside the official process specified herein.

By submission of a response to this RFQ, the Consultant agrees to the communication protocol herein.

CONTRACT REQUIREMENTS

The selected Consultant will be required to execute the contract within 10 days after receipt of the contract.

INSURANCE - During the term of this contract, the Consultant will carry professional liability insurance in the amount of \$1,000,000. The Prime-Consultant may require the Sub-Consultant(s) to carry professional liability insurance. This insurance will be written on a "claims-made" basis. Prior to executing the contract, the Consultant will provide a Certificate of Insurance to DOTD showing evidence of such professional liability insurance.

AUDIT - The selected Consultant/Team will allow the DOTD Audit Section to perform an annual overhead audit of their books, or provide an *independent* Certified Public Accountant (CPA) audited overhead rate. This rate must be developed using Federal Acquisition Regulations (FAR) and guidelines provided by the DOTD Audit Section. In addition, the Consultant/Team will submit semi-annual labor rate information, when requested by DOTD.

The selected Consultant/Team will maintain an approved Project Cost System, and segregate direct from indirect cost in their General Ledger. Pre-award and post audits, as well as interim audits, may be required. For audit purposes, the selected Consultant/Team will maintain accounting records for a minimum of five years after final contract payment.

Any Consultant currently under contract with the DOTD and who has not met all the audit requirements documented in the manual and/or notices posted on the DOTD Consultant Contract Services Website (www.dotd.louisiana.gov), will not be considered for this project.

SUBMITTAL REQUIREMENTS

One original (**stamped "original"**) and **five** copies of the SF 24-102 must be submitted to DOTD. All submittals must be in accordance with the requirements of this advertisement and the Consultant Contract Services Manual. Any Consultant/Team failing to submit any of the information required on the SF 24-102, or provide inaccurate information on the SF 24-102, will be considered non-responsive.

Any Sub-Consultants to be used, including Disadvantaged Business Enterprises (DBE), in performance of this Contract must also submit a SF 24-102, which is completely filled out and contains all information pertinent to the work to be performed.

The Sub-Consultant's SF 24-102 must be firmly bound to the Consultant's SF 24-102. In Section 9, the Consultant's SF 24-102 must describe the **work elements** to be performed by the Sub-Consultant(s), and state the approximate **percentage** of each work element to be subcontracted to each Sub-Consultant.

Name(s) of the Consultant/Team listed on the SF 24-102, must precisely match the name(s) filed with the Louisiana Secretary of State, Corporation Division, and the Louisiana State Board of Registration for Professional Engineers and Land Surveyors.

The SF 24-102 will be identified with **State Project Nos. H.006138.5** and **H.009187.5**, and will be submitted **prior to 3:00 p.m. CST** on **Tuesday Monday**, **September 6 12**, **2011**, by hand delivery or mail, addressed to:

Department of Transportation and Development Attn.: Ms. Debra L. Guest, P.E. Contracts Administrator 1201 Capitol Access Road, **Room 405-T** Baton Rouge, LA 70802-4438 or Telephone: (225) 379-1989

REVISIONS TO THE RFQ

DOTD reserves the right to revise any part of the RFQ by issuing an addendum to the RFQ at any time. Issuance of this RFQ in no way constitutes a commitment by DOTD to award a contract. DOTD reserves the right to accept or reject, in whole or part, all Qualification Statements submitted, and/or cancel this announcement if it is determined to be in DOTD's best interest. All materials submitted in response to this announcement become the property of DOTD, and selection or rejection of a submittal does not affect this right. DOTD also reserves the right, at its sole discretion, to waive administrative informalities contained in the RFQ.